

183 have been amended to further define Applicant's claimed invention.

Applicant traverses the election of species requirement made between Species 4 and 5. Applicant refers the Examiner to page 8, lines 10-11, of the Specification under the "Brief Description of the Drawings", where it is stated that Fig. 19A is "an enlarged fragmentary perspective view of the implant surface of Fig. 16." Figure 16 was included in Species 4 by the Examiner. Applicant respectfully requests the Examiner to withdraw the species restriction of Species 5.

Entry and consideration of the above amendments prior to the examination of the above-identified application is respectfully requested.

Please grant any extensions of time required to enter this reply and charge any additional required fees to our deposit account 50-1066.

Respectfully submitted,

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CHANGES TO THE CLAIMS

57. (Amended) An interbody spinal implant for insertion between adjacent vertebral bodies of a human spine, said implant comprising:

a leading end for introduction of said spinal implant into the spine, an opposite trailing end, spaced apart sides therebetween, and a longitudinal axis passing through said leading and trailing ends;

opposite upper and lower surfaces between said leading and trailing ends and said spaced apart sides, said upper surface adapted for placement in engagement with the bone of one of the vertebral bodies and said opposite lower surface adapted for placement toward the bone of the other of the vertebral bodies when said implant is placed between the adjacent vertebral bodies; and

a first plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said first plurality of bone engaging structures comprising a surface[projections] projection having at least one forward facing facet directed at least in part toward said leading end and at least one rearward portion directed at least in part toward said trailing end, said forward facing facet and said rearward portion having a length and a slope, the length of said forward facing facet being longer than the length of said rearward portion, the slope of said rearward portion being steeper than the slope of said forward facing facet, said projections having opposed side facets between said forward facing facet and said rearward portion, said side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

66. (Amended) The spinal implant of claim 57, wherein[each]at least one of said surface projections includes a left forward side facet and a right forward side facet directed toward said leading end and said sides, respectively, of said implant.

67. (Amended) The spinal implant of claim 57, wherein[each]at least one of said surface projections includes a left rearward side facet and a right rearward side facet directed toward said trailing end and sides, respectively, of said implant.

68. (Amended) The spinal implant of claim 66, wherein[each]at least one of said surface projections includes a left rearward side facet and a right rearward side facet directed toward said trailing end and sides, respectively, of said implant.

114. (Amended) The spinal implant of claim 57, further comprising a second plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said second plurality of bone engaging structures comprising a surface[projections] projection having at least a left forward side facet and a right forward side facet directed at least in part toward said leading end and said sides, respectively, and at least one rearward facet directed at least in part toward said trailing end, said left and right forward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

116. (Amended) The spinal implant of claim 114, further comprising a third plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said third plurality of bone engaging structures comprising a surface[projections] projection having at least a left rearward side facet and a right rearward side facet directed at least in part toward said trailing end and said sides, respectively, and at least one forward facing facet directed at least in part toward said leading end, said left and right rearward

side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

120. (Amended) The spinal implant of claim 57, further comprising a third plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said third plurality of bone engaging structures comprising a surface[projections]projection having at least a left rearward side facet and a right rearward side facet directed at least in part toward said trailing end and said sides, respectively, and at least one forward facing facet directed at least in part toward said leading end, said left and right rearward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

146. (Amended) An interbody spinal implant for insertion between adjacent vertebral bodies of a human spine, said implant comprising:

a leading end for introduction of said spinal implant into the spine, an opposite trailing end, spaced apart sides therebetween, and a longitudinal axis passing through said leading and trailing ends;

opposite upper and lower surfaces between said leading and trailing ends and said spaced apart sides, said upper surface adapted for placement in engagement with the bone of one of the vertebral bodies and said opposite lower surface adapted for placement toward the bone of the other of the vertebral bodies when said implant is placed between the adjacent vertebral bodies; and

a plurality of bone engaging structures formed on said upper and lower surfaces, of at least one of said plurality of bone engaging structures comprising a surface[projections] projection having at least a left forward side facet and a right

forward side facet directed at least in part toward said leading end and said sides, respectively, and a single rearward facet directed at least in part toward said trailing end, said left and right forward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

147. (Amended) The spinal implant of claim 146₁ further comprising another plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said another plurality of bone engaging structures comprising a surface[projections] projection having at least one forward facing facet directed at least in part toward said leading end and at least one rearward portion directed at least in part toward said trailing end, said forward facing facet and said rearward portion having a length and a slope, the length of said forward facing facet being longer than the length of said rearward portion, the slope of said rearward portion being steeper than the slope of said forward facing facet, said projections having opposed side facets between said forward facing facet and said rearward portion, said side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

149. (Amended) The spinal implant of claim 147₁ further comprising a third plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said third plurality of bone engaging structures comprising a surface[projections] projection having at least a left rearward side facet and a right rearward side facet directed at least in part toward said trailing end and said sides, respectively, and at least one forward facet directed at least in part toward said leading end, said left and right rearward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

153. (Amended) The spinal implant of claim 146, further comprising a third plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said third plurality of bone engaging structures comprising a surface[projections] projection having at least a left rearward side facet and a right rearward side facet directed at least in part toward said trailing end and said sides, respectively, and at least one forward facet directed at least in part toward said leading end, said left and right rearward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

154. (Amended) The spinal implant of claim 146, further comprising another plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said another bone engaging structures comprising a surface[projections] projection having at least one forward facing facet directed at least in part toward said leading end and at least one rearward facet directed at least in part toward said trailing end, each of said forward facet and rearward facet having a length and a slope, the length of said forward facet being longer than said rearward facet, the slope of said rearward facet being steeper than the slope of said forward facet, said surface projections having opposed side facets directed generally toward said sides of said implant, said side facets located between said forward facet and said rearward facet of said surface projections, said side facets converging toward each other in a direction away from the base of said projections.

175. (Amended) An interbody spinal implant for insertion between adjacent vertebral bodies of a human spine, said implant comprising:

a leading end for introduction of said spinal implant into the spine, an opposite trailing end, spaced apart sides therebetween, and a longitudinal axis passing through said leading and trailing ends;

opposite upper and lower surfaces between said leading and trailing ends and said spaced apart sides, said upper surface adapted for placement in engagement with the bone of one of the vertebral bodies and said opposite lower surface adapted for placement toward the bone of the other of the vertebral bodies when said implant is placed between the adjacent vertebral bodies; and

a plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said [third] plurality of bone engaging structures comprising a surface[projections] projection having at least a left rearward side facet and a right rearward side facet directed at least in part toward said trailing end and said sides, respectively, and a single forward facet directed at least in part toward said leading end, said left and right rearward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

176. (Amended) The spinal implant of claim 175, further comprising another plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said another plurality of bone engaging structures comprising a surface[projections] projection having at least one forward facing facet directed at least in part toward said leading end and at least one rearward portion directed at least in part toward said trailing end, said forward facet and said rearward portion having a length and a slope, the length of said forward facet being longer than the length of said rearward portion, the slope of said rearward portion being steeper than the slope of said forward facet,

said projections having opposed side facets between said forward facet and said rearward portion, said side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

178. (Amended) The spinal implant of claim 176, further comprising a second plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said plurality of bone engaging structures comprising a surface[projections] projection having at least a left forward side facet and a right forward side facet directed at least in part toward said leading end and said sides, respectively, and a single rearward facet directed at least in part toward said trailing end, said left and right forward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

182. (Amended) The spinal implant of claim 175, further comprising a second plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said second plurality of bone engaging structures comprising a surface[projections] projection having at least a left forward side facet and a right forward side facet directed at least in part toward said leading end and said sides, respectively, and a single rearward facet directed at least in part toward said trailing end, said left and right forward side facets having at least a first portion in a plane at an angle to the longitudinal axis of said implant.

183. (Amended) The spinal implant of claim 175, further comprising another plurality of bone engaging structures formed on said upper and lower surfaces, at least one of said another bone engaging structures comprising a surface[projections] projection having at least one forward facing facet directed at least in part toward said leading end

and at least one rearward facet directed at least in part toward said trailing end, each of said forward facet and rearward facet having a length and a slope, the length of said forward facet being longer than said rearward facet, the slope of said rearward facet being steeper than the slope of said forward facet, said surface projections having opposed side facets directed generally toward said sides of said implant, said side facets located between said forward facet and said rearward facet of said surface projections, said side facets converging toward each other in a direction away from the base of said projections.